

ALLEGATO A

ELEMENTS FOR TECHNICAL SPECIFICATIONS FOR THE SUPPLY OF ARTISTIC WORKS IN STONE OR CONCRETE MATERIAL INTENDED FOR PLACEMENT ON THE SEA BED FOR ECOTOURISM PURPOSES

DEPTH OF INSTALLATION: 8-30 METERS

MATERIAL

The material used to construct the 3D-printed work can be chosen from stone or cement conglomerate. In the case of stone, there are no restrictions on the type of mineral used. In the case of conglomerates, it will be possible to choose between cement or quarry aggregates.

GEOMETRY

The shape of the artwork is freely chosen by the artist, but it must meet the functional requirement of being enjoyable not only for divers but also for marine fauna and flora. Since one of the aims of the installation is to promote the increase of marine biodiversity at the installation site, preference is given to artistic works that feature cavities and undercuts, which are useful for providing shelter for marine fauna, and a large surface area for colonization by corals, sponges, gorgonians, and other biomass.

The numerical index that correlates the shape with its ability to attract biomass is given by the ratio between the surface area and the volume. This index is called bio-attractiveness. For example, a structure consisting of a solid cube with sides measuring 1 meter resting on the seabed has a bio-attractiveness index equal to the ratio between the surface area of the five faces (5 m^2) and its volume (1 m^3), i.e. equal to $5 \text{ m}^2/\text{m}^3$

The bio-attractiveness index of the artwork must be greater than 30/m.

SURFACE ROUGHNESS

Rough surfaces are preferred to smooth ones. Surface roughness refers to the irregularity of a machined surface, characterized by small peaks and valleys, and is defined as the distance between the bottom of the valleys and the micro-peaks. Except for areas of the work that must be smooth for artistic reasons, on average the roughness must be greater than 0.2 mm, i.e., the surface must be rough.

DIMENSIONS

The work of art may consist of one or more separate elements forming a composition or overlapping to form a larger structure.

The 'Bounding Box', i.e. the parallelepiped that encloses the artwork or a part of it, is defined between a minimum and a maximum value.

Minimum dimensions: 100 cm x 100 cm x 100 cm

Maximum dimensions: 200 cm x 200 cm x 150 cm

WEIGHTS

The maximum weight of the work or any of its components cannot exceed 35 quintals.

LIFTING ACCESSORIES

The artwork must be equipped with hooks or eyebolts and power take-offs for lifting.

Artworks resting on reinforced concrete or steel platforms equipped with eyebolts or handles for lifting with a crane and equipped with feet on the bottom for loading or unloading from trucks with forklifts are preferred.